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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,664	03/24/2004	Alexandre Jard	Q102842	4334

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EXAMINER	
TRAN, KHANH C	

ART UNIT	PAPER NUMBER
2611	

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09/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/807,664	JARD ET AL.	
	Examiner	Art Unit	
	KHANH C. TRAN	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,11-14,22-25 and 32* is/are rejected.

7)☒ Claim(s) *5-10,15-21 and 26-31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Amendment filed on 7/7/2008 has been entered. Claims 1-32 are still pending in this Office action.

Response to Arguments

2. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 11-14, 22-25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bejjani et al. U.S. Patent 6,430,166 B1.

Regarding claim 1, Bejjani et al. teaches in FIG. 1 a Rake receiver 1 comprises a path searcher 3, a channel estimator 4 and a combiner 5; see column 3 lines 10-15. Further in lines 44-50, Bejjani et al. teaches the path searcher needs a power profile prior to the path selection operation.

Bejjani et al., does not explicitly disclose the step of "determining a propagation profile of propagation channel" as set forth in the application claim.

In column 2 lines 25-30, Bejjani et al. discusses the power profile might be computed by non-coherent averaging of instantaneous channel profiles performed on a slot by slot basis in prior art, therefore, one of ordinary skill in the art at the time the invention was made would have recognized that Bejjani et al. teachings include the step of determining a power profile of channel profiles before path searching operation.

In column 4 lines 9-11, see also FIG. 4, the path searcher is linked to the dedicated channel DPCH (carrying out user specific data; see column 2 lines 6-12) demodulation 4b. In view of that, RAKE receiver 1 measures user specific data relating to power profile of channel profiles.

Referring FIG. 4, Bejjani et al. teaches that due to better signal to noise ratio of the common channels, path delays selection con be made in a first stage for common channels to select a set S1 of possible path delays based on full path searching procedure as described in the parallel patent application; applied on the common channels. In the second stage, a subset S2 (that corresponds to predetermined maximum number of propagation paths claimed) of the initial set S1 is retained on a reduced path searching procedure restricted to the L initially selected delays in the set S1. And DPCH demodulation 4b estimates user specific data as a function of the measured user specific data relating to power profile of channel profiles as claimed in the application claim.

Regarding claim 2, in column 3 lines 20-35, see also FIG. 1, Bejjani et al. discusses that the principle of the Rake receiver is to combine the maximum number of

different paths, by introducing delays in the receiver. These paths and delays are respectively detected and estimated by the functional block called path searcher 3. The second block of the Rake receiver is the channel estimator 4, which performs the estimation of the channel impulse response over all the detected paths by the path searcher 3.

Regarding claim 3, in column 3 lines 44-55, see also FIG. 4, Bejjani et al. takes into account the instantaneous power profile 8, averaging (averaging filter 9) of the instantaneous power profile and selected paths based on the averaging (path selector 10).

Regarding claim 4, in column 3 lines 60-64, Bejjani et al. further discloses that the basic observation is that the power delay spread experienced by the dedicated channels is a subset of the one experienced by the common channels. In light of that, the delay spread indicates the extent of the [redacted] from different multipath components, i.e. the greater the delay spread, the later arrives the last multipath component.

Regarding claim 11, claim is rejected on the same ground as for claim 1 because of similar scope.

Regarding claim 12, claim is rejected on the same ground as for claim 2 because of similar scope.

Regarding claim 13, claim is rejected on the same ground as for claim 3 because of similar scope.

Regarding claim 14, claim is rejected on the same ground as for claim 4 because of similar scope.

Regarding claims 22 and 32, claim is rejected on the same ground as for claim 1 because of similar scope. Bejjani et al. does not however discuss, a computer program as set forth in the application claim.

Nevertherles, as known in the art, for purposes of testing and simulation, one of ordinary skill in the art at the time the invention was made would have been motivated to implement Bejjani et al. teachings in a computer program as set forth in the pending claim.

Regarding claim 23, claim is rejected on the same ground as for claim 2 because of similar scope.

Regarding claim 24, claim is rejected on the same ground as for claim 3 because of similar scope.

Regarding claim 25, claim is rejected on the same ground as for claim 4 because of similar scope.

Allowable Subject Matter

4. Claims 5-10, 15-21 and 26-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rached et al. U.S. Patent 7,372,894 B2.

Jard et al. U.S. Patent Application Publication No. US 2003/0043893 A1.

Iochi et al. U.S. Patent Application Publication No. US 2002/0181628 A1.

Ogawa et al. U.S. Patent Application Publication No. US 2002/0024992 A1.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH C. TRAN whose telephone number is (571)272-

3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCT

/KHANH C. TRAN/
Primary Examiner, Art Unit 2611